

Ecosystem Vulnerability in the Eastern Region

A Synthesis of Critical Information for Land Management

We are developing a new climate change vulnerability assessment for priority ecosystems in the Midwest and Northeast United States.

The Ecosystem Vulnerability in the Eastern Region (EVER) assessment will synthesize information from ecosystem models, published research, Indigenous Knowledge, and land manager expertise to present the best available science. The assessment will serve as a foundational resource for the region, focusing on the needs of land managers, forest stewards, and planners. Producing the assessment will involve collaboration between more than 200 participants from federal, state, tribal, nongovernmental, private sector, and academic organizations. Assessment results will be disseminated via a written report published by the USDA Forest Service Northern Research Station, as well as an online tool. The report will provide details about provinces and ecosystems in the region and the companion tool will enable users to interact with spatial data and explore assessment results at multiple scales. Assessment writing and development is ongoing in 2026.

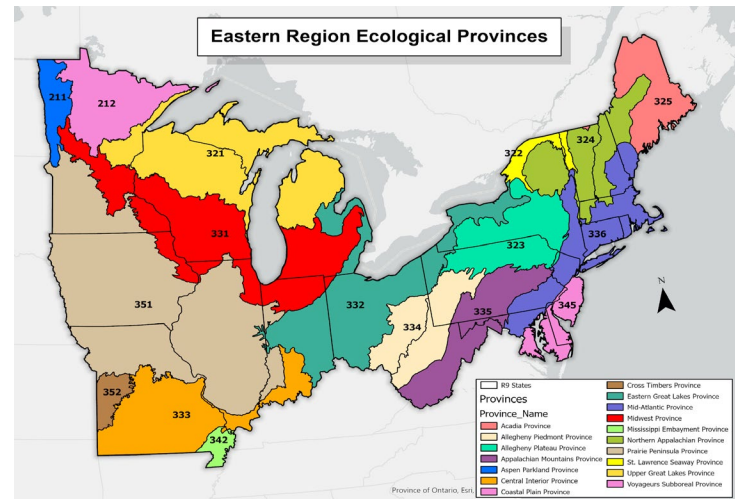


Figure 1.—Ecological Provinces are units of land defined by major climate zones, native vegetation, and biomes such as prairies, deciduous forests, or boreal forests. The 20-state region of the Midwest and Northeast United States contains 17 Ecological Provinces, as defined by the 2025 ECOMAP update.

The assessment will:

- Feature a singular regionwide report with province-level chapters and a companion online tool
- Cover the full geographic extent of the 20-state Eastern Region
- Include a wide variety of terrestrial ecosystems, spanning forests, grasslands, and wetlands
- Utilize the U.S. National Vegetation Classification to describe ecosystems in a consistent way across the region
- Divide the landscape according to the 2025 ECOMAP updated Ecological Provinces (Fig. 1)



Marion Lake on the Ottawa National Forest. USDA Forest Service photo by Angela Welling.



Smith-Reiner Drumlin Prairies in Wisconsin. Photo by Daniel Carter, The Prairie Enthusiasts.



The Second College Grant in New Hampshire. Photo by Tony D'Amato, University of Vermont.



Harvesting on private land in Missouri. Photo by Bruce Palmer, Mission Critical Consulting, LLC.

This effort is being led by the USDA Northern Forests Climate Hub and the Northern Institute of Applied Climate Science, in support of the USDA Forest Service Northern Research Station. The Northern Institute of Applied Climate Science is a collaborative multi-institutional partnership led by the USDA Forest Service. Learn more the vulnerability assessment at forestadaptation.org/learn/resource-finder/ecosystem-vulnerability-eastern-region.

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